Amendments to the Specification:

Please replace the paragraph, beginning at page 8, line 29, with the following rewritten paragraph:

In certain embodiments, the reactive moiety is a thiol group or amino group. Either of these groups can be reacted with a suitable reagent to furnish product ~~3~~5 (as shown in FIG. ~~1~~2) that comprises thiol-reactive groups. The preferred thiol-reactive group is a dithio group. Thus, for example, where the reactive moiety is a thiol group, treatment with a reactive dithio-containing reagent furnishes a surface with reactive dithio groups. An exemplary transformation in this context employs 5,5'-dithio-bis(2-nitrobenzoic acid) ("DTNB"):

Please replace the paragraph, beginning at page 9, line 2, with the following rewritten paragraph:

Similarly, surface amino groups can be transformed into reactive dithio groups of product ~~3~~5 by using other dithio-containing reagents known to react with amino groups. Illustrative of this variant is the transformation depicted below, where succinimidyl 3-(2-pyridyldithio)propionate ("SPDP") provides the dithio moiety:

Please replace the paragraph, beginning at page 9, line 7, with the following rewritten paragraph:

Next, thiol-reactive dithio groups of product ~~3~~5 were contacted with a thiol-containing fluorophore, Fl-SH, whereby the fluorescent moiety (Fl), is tethered to the surface through a formation of a disulfide bond in product 6 as shown in FIG. 2. The invention contemplates a wide range of thiol-containing fluorophores, which can be realized by modifying any fluorescent moiety (Fl) with a thiol group. For example, reduction of compounds of the formula Fl-S-S-Fl is a useful way to prepare Fl-SH. A particularly preferred Fl-SH prepared in this manner is dansyl-L-cysteine as described in Example 5 below:

Please replace the paragraph, beginning at page 10, line 7, with the following rewritten paragraph:

Contacting any of the thiol-containing reagents described above with the thiol-reactive groups in product ~~35~~ 5 immobilizes the fluorescent moiety Fl on the surface via formation of disulfide bonds.

Please replace the paragraph, beginning at page 10, line 12, with the following rewritten paragraph:

In certain embodiments of the invention, the reactive moieties are transformed into thiol groups of product ~~34~~ 4. The transformation occurs by any well-known synthetic route directed to removal of a protective group. For example, polyurethane comprising pendant protected thiol groups, can be deprotected to generate a polyurethane comprising pending thiol groups.

Please replace the paragraph, beginning at page 11, line 3, with the following rewritten paragraph:

Next, thiol groups in product ~~34~~ 4 are reacted with a thiol-reactive fluorophore, which results in the formation of disulfide bonds in product 6. The thiol-reactive fluorophore has a group capable of disulfide bond formation. Suitable thiol-reactive fluorophores include sulfenyl chlorides of general formula Fl-S-Cl and thiosulfonates of general formula Fl-S-SO_3(C_{1-6} alkyl), each of which is capable of formally delivering a "Fl-S" moiety to surface thiol groups in product ~~34~~ 4.